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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,398	08/13/2001	Dong Soo Cho	0465-0843P	7087
2292	7590	04/15/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			WHITMORE, STACY	
			ART UNIT	PAPER NUMBER
			2812	

DATE MAILED: 04/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/927,398

Applicant(s)

CHO, DONG SOO

Examiner

Stacy A Whitmore

Art Unit

2812

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 1,2 and 9-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☒ Certified copies of the priority documents have been received in Application No. 09/228,550.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/31/2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. Claims 1-2, and 9-14 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in paper dated September 9, 2003.

Applicant's election with traverse of Group II, claims 3-8 in Paper dated September 9, 2003 is acknowledged. The traversal is on the ground(s) that examiner has not met the burden that the groupings are "independent". This is not found persuasive because Examiner showed distinctness and burden by separate classification as remaked by applicant on page 3, lines 4-6 of the response to restriction dated September 9, 2003. See MPEP 803

#### 803 Restriction - When Proper

Under the statute an application may properly be required to be restricted to one of two or more claimed inventions only if they are able to support separate patents and they are either independent (MPEP § 806.04 - § 806.04(i)) or distinct (MPEP § 806.05 - § 806.05(i)).

If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions.

#### CRITERIA FOR RESTRICTION BETWEEN PATENTABLY DISTINCT INVENTIONS

There are two criteria for a proper requirement for restriction between patentably distinct inventions:

- (A) The inventions must be independent (see MPEP § 802.01, § 806.04, § 808.01) or distinct as claimed (see MPEP § 806.05 - § 806.05(i)); and
- (B) There must be a serious burden on the examiner if restriction is required (see MPEP § 803.02, § 806.04(a) - § 806.04(i), § 808.01(a), and § 808.02).

The requirement is still deemed proper and is therefore made FINAL.

### Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the structure as claimed in claim 3 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Lumley (US Patent 4,306,289).

4. As for claim 7, Lumley discloses an instruction code selector generating encrypted instructions by manipulating received instructions [fig. 1b and 9, register array and multiplexer of Fig. 1 or ROM of fig. 9]; and a decoder decoding instructions corresponding to encrypted instructions received from the instruction code selector [fig. 1b, element 18].

5. As for claim 8, Lumley further discloses a user instruction selector selecting or changing the instructions decoded by the decoder in response to a selection by a user [col. 6, lines 48-62 - the look-up tables are the maps and the user (at least the vendor) is able to select how the instructions are encrypted by programming of the ROM and EPROM].

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumley (US Patent 4,306,289) in view of Applicant's Admitted Prior Art (hereinafter referred to as AAPA).

7. As for claim 3, Lumley discloses the invention substantially as claimed, including an instruction decode unit in a microprocessor comprising:

an instruction register storing instructions fetched from a memory [fig. 1b, element 17];

an instruction decoder decoding instruction codes of the instructions stored in the instruction register [fig. 1b, element 18]

an instruction code selector connected between the instruction register and the instruction decoder, allowing a user to select a signal corresponding to at least one of a plurality of instruction maps wherein said instruction code selector is operable to encrypt instruction code [fig. 1b, element figs. 1b-2b; fig. 4, elements 31-33; fig. 5, elements 31-33; fig. 6; fig. 9, elements 31, 51, and 33; col. 6, lines 10-16, and 47-62 – the look-up tables are the maps and the user (at least the vendor) is able to select how the instructions are encrypted by programming of the ROM and EPROM].

Lumley does not specifically disclose designating micro-instructions to be executed and a micro-ROM outputting a series of the microinstructions designated by the instruction decoder.

AAPA disclose the use of a micro-ROM designating micro-instructions to be executed and a micro-ROM outputting a series of the microinstructions designated by the instruction decoder [fig. 1; pgs. 1-3 concerning the discussion of fig. 1].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lumley and AAPA because having a micro-Rom would improve Lumley's system by increasing the size of memory (as opposed to registers) for storing code that changes to encryption code of Lumleys, thereby increasing Lumleys ability to encrypt more instructions.

8. As for claim 4, Lumley does not specifically disclose a user instruction selector selecting or changing the microinstructions of the micro-ROM in response to a selection by a user so as to change the operation of instruction code.

AAPA discloses a user instruction selector selecting or changing the micro-instructions of the micro-ROM in response to a selection by a user so as to change the operation of instruction code [pages 1-3, fig. 1]. Lumley discloses a ROM for changing the operation of instruction code as cited in col. 6 in the rejection of claim 3 above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lumley and AAPA because using the micro-ROM to change the operation of instruction code would use smaller lower level instruction code than normal which is faster than normal higher level instruction code in order to speed Lumley's processing of changing instruction operation.

9. As for claim 5, Lumley discloses the user instruction selector selects the instructions using a mask option or a particular register [fig. 1b, register array and multiplexer].

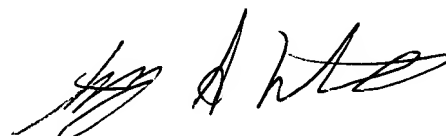
10. As for claim 6, Lumley discloses two or more instruction maps [col. 6, lines 53-62, where a plurality of maps may be re-programmed].

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stacy A Whitmore whose telephone number is (571) 272-1685. The examiner can normally be reached on Monday-Thursday, alternate Friday 6:30am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on (571) 272-1679. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stacy A Whitmore

A handwritten signature in black ink, appearing to read 'Stacy A Whitmore', written in a cursive style.

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Primary Examiner

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SAW